

REMARKS

Please reconsider the application in view of the above amendments and the following remarks. Applicant thanks the Examiner for carefully considering this application.

I. Interview Summary

Applicant thanks the Examiner for courtesies extended during the personal interview conducted on July 10, 2006. U.S. Patent No. 3,513,728 and the term “enlarging” were discussed. The Applicant has reviewed the Interview Summary of the Interview of July 10, 2006, submitted by the Examiner and believed that it is complete and accurately represents the substance of the Interview of July 10, 2006. Further, the Applicant believes that no additional written statement pursuant to MPEP § 713.04 are necessary. If this belief is incorrect, the Examiner is requested to call the undersigned or his associates at the telephone number listed below.

II. Disposition of Claims

Claims 15-24 28-48, 50, and 52 are pending in the application. Claims 15-24, 34, 35, 38-46, and 48 are withdrawn from consideration. Claims 38 and 47 are independent. The remaining claims depend, either directly or indirectly, from claims 38 and 47.

III. Claim Amendments

Claim 47 has been amended by this reply. No new matter has been added by way of this amendment. Support for these amendments can at least be found in FIG. 3F.

IV. Rejection(s) under 35 U.S.C. § 102

Claim 47 stands rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,513,728 issued to Hudson, et al. ("Hudson). To the extent this rejection still applies to claim 47 as amended, the rejection is respectfully traversed.

Claim 47 recites a method of forming a drill bit structure comprising machining a plurality of holes in preselected locations in the drill bit structure, positioning a spacer insert in each of the plurality of holes, applying a hardfacing material over at least a portion of an outer surface of the drill bit structure, removing the plurality of spacer inserts from the plurality of holes, enlarging the plurality of machined holes to a substantially uniform selected diameter so as to enable disposition of drilling inserts therein, and positioning drilling inserts in each of the plurality of enlarged holes.

Hudson discloses a method for manufacturing an apparatus wherein a hole within the surface of the apparatus is plugged with a rod, and hardfacing material is applied to the surface around the plug. A scraping tool is then inserted over the rod and rotated to remove an annular area of hardfacing material adjacent and encircling the rod. Once the hardfacing material immediately surrounding the hole and rod has been removed, heat is applied to the remaining hardfacing material. The rod is then removed from the hole, a very small chamfer is formed along the edge of the hole, and an insert is pressed therein.

Hudson fails to disclose enlarging the plurality of machined holes to a substantially uniform selected diameter, after applying the hardfacing material and removing the plurality of spacer inserts from the machined holes, so as to enable disposition of drilling inserts therein, and positioning drilling inserts in each of the plurality of enlarged holes. The present

invention, as recited in claim 47 as amended, advantageously allows for a drill bit, specifically the areas between drilling inserts which are highly susceptible to erosion due to exposure to drilling fluids and cuttings, to be adequately protected.

While Hudson teaches chamfering the area surrounding the hole, this is *not* a teaching of enlarging the machined holes to a substantially uniform selected diameter so that the drilling inserts may be placed therein, as recited in claim 47. Rather, the small chamfer is placed only in the opening of the hole, the same area in which there is no hardfacing material remaining, without changing the diameter of the hole.

In view of the above, Hudson fails to disclosed the present invention as recited in claim 47 as amended. Thus, claim 47 as amended is patentable over Hudson. Dependent claims are allowable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

V. Rejection(s) under 35 U.S.C. § 103

Claims 28-31, 36, 37, and 50 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hudson in view of U.S. Patent Publication No. 2002/0035895 ("Davies") which issued as U.S. Patent No. 6,601,475. Claim 32 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Hudson in view of Davies, and further in view of U.S. Patent No. 6,568,491 issued to Matthews, et al. The Applicant respectfully notes that Davies is a § 102(e) reference and that both the present application and Davies are, and were at the time the invention was made, assigned to the present assignee, Smith International, Inc. The assignment for the present application is recorded at Reel 014778, Frame 0322, and the assignment for Davies is recorded at Reel 012242, Frame 0229. Thus, under 35 U.S.C. § 103(c), Davies cannot be used

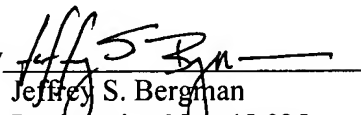
as the basis for a § 103 rejection. Therefore, all of the § 103 rejections that are based on Davies are untenable and must be withdrawn. Accordingly, withdrawal of this rejection is respectfully requested.

VI. Conclusion

Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 05516/106002).

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Respectfully submitted,

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Attachments